On the Edge of Life, II: House Officer Struggles Recorded in an Intensive Care Unit Journal

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Background: In a general hospital, few clinical settings match the intensity of the intensive care unit (ICU) experience. Clinical rotations in ICUs elicit and emphasize the struggles house officers face on a daily basis throughout their training.

Method: These struggles were recorded by hundreds of residents in a journal maintained in one Medical ICU for the past 20 years. We systematically reviewed these unsolicited entries to develop categories that define and illustrate common stressors.

Results: Stressors for house officers include isolation, insecurity, care for the terminally ill, sleep deprivation, and long work weeks.

Conclusion: By placing the struggles of house staff in context, trainees and their residency training programs can be prepared for the intensity of the experience and for work in clinical practice settings that follows completion of training.

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Medical training offers tremendous rewards (e.g., exposure to a variety of patients and both common and esoteric diseases, close mentoring, a camaraderie with residency classmates that often spans a career) and challenges (sleep deprivation, dealing with illness and death, isolation from family and friends). While much effort has been spent refining the curriculum so that house officers can practice independently, relatively little attention has been devoted to the trials and tribulations of house-staff training. Clearly, training for a career in primary care or in a medical subspecialty (e.g., cardiology, oncology, nephrology, or gastroenterology) is stressful. Depression, substance abuse, marital discord, and suicide are among the by-products of this stress.[1–6]

In a general hospital, few clinical settings match the intensity of the intensive care unit (ICU) experience; in the ICU, the stakes are at their highest, and pain, delirium, and death are daily fare. The ICU is also fertile ground for interpersonal struggles and intrafamilial conflicts; sleep deprivation reduces the ability of even the most level-headed of trainees to function properly. Though more intense, the struggles faced in the ICU are similar to those faced throughout the training of subspecialty and primary care house staff.

By placing the struggles faced by medical house officers in the context of the rigors of a medical training program (and its inherent long hours, lack of sleep, and balancing of inexperience with giving good patient care) and preparing trainees and residency training programs for the intensity of the experience, we believe that young physicians will be better able to deal with residency training and with the transition to work in a variety of clinical practice settings that follows residency training and that rests upon thoughtful and compassionate care.

Scope of the Problem

The transition from medical student to house officer and physician status is an abrupt one. However, acquisition of the skill set and knowledge base that facilitate medical competence and confidence is more gradual. In his address to the Harvard Medical School graduating class of 1979, Dr. Ned Cassem, former chief of the Department of Psychiatry at the Massachusetts General Hospital (MGH), elucidated the risks and benefits of the internship year. According to Cassem,[7] the risks and benefits were identical. His intention was to prepare the future class of interns in internal medicine, surgery, pediatrics, obstetrics/gynecology, and psychiatry for the common travails of internship. Cassem's list of risks included acute and chronic delirium, shattered self-esteem, depression, suicidal ideation, marital disaster, obesity, alcohol and drug abuse, disillusionment with the senior staff, and chronic rage and hatred.[7] Not surprisingly, some of these risks have been enumerated in the medical literature.[2,8,9] A recent study of medical interns reported significant increases in depression-dejection, anger-hostility, and fatigue-inertia, as well as an increase in personal distress levels, as the year progressed.[10]

In response to these risks associated with being a house officer, institutions created programs to help the afflicted or those at risk and to assist residents in dealing with stress, as resident coping skills may be inadequate.[11] Programmatic efforts have included individual and group meetings; weekly support meetings; psychiatrically oriented, case-centered discussions of patients; and 1-time retreats with formal, process-oriented group discussions.[3] At the MGH, weekly autognosis, or self-awareness, rounds have been held in the Medical ICU (MICU) for more than 20 years.[3] As an adjunct to these meetings, a journal (diary) was created to enhance awareness of the stressful nature of internship and to facilitate open discussions intended to improve function. Many comments from the journal were read in the meetings, especially when there was an emotional lull in the sessions. Entries stimulated and even provoked expression of the thoughts and feelings of the MICU staff at the time. Confidentiality was not sought. Some entries were anonymous, more were signed; many were read without attribution to the writer's name. The journal represents a rare opportunity to glimpse the house officers' sources of stress as they were expressed and collected prospectively. It also provides an opportunity to review the history of ICUs and what is known about the stresses of house-staff training programs.

METHOD

Keeping track of thoughts, feelings, and associations, via a journal or diary, allowed for further reflection and sparked open discourse. The "MICU journal" or "Red Book" (as the first of the journal volumes had a red cover) was kept in an MICU conference room used only by physicians for 20 years. We (M.A.S. and T.A.S.) systematically reviewed all of the entries in the journal individually, each identified "significant" entries (i.e., those entries that were particularly lengthy, emotional, humorous, angry, or stressful), and met periodically to determine which culled entries overlapped and to identify overarching principles that highlighted house-staff stressors. Entry choice was based on our collective experience of entries that elicited reactions in subsequent house officers who read and discussed the book. The rare instances of disagreement were discussed, and a consensus was reached to either include or exclude an entry from an overarching topic head. All identified "significant" entries were classifiable under at least 1 topic head. All entries were unsolicited, documented in real-time, and recorded without knowledge of this analysis.

RESULTS

A total of 7 volumes of text were collected over a 20-year period from January 1980 to December 1999. Each volume consisted of a Mead-style bound notebook, and hundreds of journal entries were contributed by hundreds of house officers. An exact count of the number of authors, the number of entries, and the number of entries from each training class or from each year is impossible, as many entries were anonymous and/or without dates. To our knowledge, all entries were contributed by physicians, though other health professionals (e.g., nurses, respiratory therapists) were quoted frequently. Entries were composed of personal reflections; quotations of authors, philosophers, and famous physicians; original compositions of art and poetry; newspaper and magazine clippings; notes written by patients or family members; and reports of conversations among physicians, nurses, patients and families; physicians and nurses; and patients/families and medical staff.

Table 1. Common Stressors for Intensive Care Unit (ICU) Physicians

Transition from medical student to physician
Causes of stress: lack of medical knowledge, lack of technical knowledge, inability to cure, low self-esteem
Isolation
Causes of stress: physical isolation of the ICU, intervening technology, ICU jargon
Insecurity
Care for the terminally ill
Causes of stress: undeveloped skills in caring for the dying, inability to cure, vulnerability through seeing oneself or one's family in the patient
Sleep deprivation/being on-call
Coping mechanisms: covering over, overreflecting
Results: feeling a need to be cared for after being on-call, cognitive deficits, emotional deficits
Causes of stress: lack of supervision, lack of control
Long work weeks
Results: lack of free time, lack of family-specific time

The specific stressors identified and retold in the MICU journal that contribute to house officers' struggles include the transition from medical student to physician, isolation, insecurity, care for the terminally ill, sleep deprivation/being on-call, and long work weeks (Table 1). Isolation is brought about by the physical separation of the typical ICU from the rest of the hospital, the distance brought about in the doctor-patient interaction by intervening technology (e.g., endotracheal tubes, cardiac monitors, and central lines), and the ICU-specific jargon used in the management of patients.

The Transition From Medical Student to Physician

A number of examples from the journal highlight what the early days of internship and time sequestered in the hospital have been like for a generation of medical house officers (dates of entries have been modified to maintain anonymity). The following entries focus on the stress of starting an internship.

> *July, 1990s:* At 7:00 a.m., I entered the MICU to begin my first rotation. And I was scared. I pushed the big silver button on the wall outside the MICU

to open the automatic doors, walked through, and was struck at first by the sounds: medication machines beeping in sets of three ("Bing-bing, bong; bing-bing, bong") to notify the nurses that a medication had run out or that an I.V. line was kinked, cardiac monitors for each patient recording normal heart rhythms ("Bee-boop, bee-boop, bee-boop . . .bomp") or warning of abnormal ones ("Ring! Ring! Ring!"), the ventilator machines alarming (during periods when patients stopped breathing) in one long, continuous screech ("Meeeeeeeeeeeeeeehhhh!"), and the janitor buffing the floors ("Rumm-ah-rumm-ah-rumm-ah-rumm"). Within a few days, I could close my eyes and identify every sound and know which were serious and which I could ignore. I even adapted to treat the sounds like background white noise, though when I spoke to my wife from the phone at the nurse's station, she always reminded me how much the cacophony still bothered her.

August, 1990s: I kiss my wife goodbye and enter the mammoth hospital that is slowly and sadly becoming a second home. My first inpatient rotation is in the MICU, overwhelming on both an intellectual and emotional level. This feeling of inadequacy is basically suppressed as I join my junior resident on morning rounds, gathering numbers, wondering when that blasted tech is going to run the bloods today. Our first patient is a 28-year-old woman with rapidly progressive respiratory failure, on ECMO/CVVH/pentobarb [extracorporeal membranous oxygenation/continuous venovenous hemodialysis/pentobarbital] coma. The last bit is mind-boggling—we preserved her brain by inducing coma, but we have no idea what will be left if by some miracle she pulls through. The fleeting and false hope of a lung transplant is in the works, but we know it will never happen. If I stop to think about it, I know that woman is going to die, but [I] choose not to think about this fact. Unbelievable technology is keeping her alive, hundreds of thousands of dollars, and a horde of consultants—will it be for naught? Best not to think about it.

July, 1980s: Working with a new intern at the beginning of the year is not unlike having a child. I suppose. The first day you go through all the routine idiosyncrasies of the hospital—where to get blood sent, how to get blood gas results, where to request films—and then slowly the interns take on more and more responsibility and begin as they should to run the unit. More than once I've been surprised and pleased at PUP [pick-up-the-pieces] rounds to hear what they've done. There does seem to be a delicate balance between watching out or watching over them and leaving them alone enough for them to do their work and learn from it. It's almost sad that after 4 weeks I almost felt superfluous in the ICU at afternoon PUP rounds. Contrast that feeling to the sense of being indispensable on the first day. Of course, that's how the year progresses. And that's part of the transition between being an intern and being a junior [resident]. . . .

The transition from medical student to ICU intern is abrupt, and the transition from ICU intern to junior resident is filled with newfound responsibilities and stresses. Preparing oneself and others for these transitions requires time and a well-planned strategy. Moreover, the isolation from patients because of intervening technology and sedating medication is striking; little support is typically obtained while dealing with critically ill individuals and abundant technology.

In the 1980s and 1990s, particularly following the Libby Zion case,[12] a great deal of attention was turned to limiting the number of consecutive hours interns could work, to intern and junior resident supervision, and to the maximum number of hours per week interns should work and the number of days off per month they should expect. Libby Zion was cared for by an intern under the supervision of a junior resident. She was treated with meperidine for agitation and shivering and haloperidol for restlessness and, a few hours after presenting to the emergency room, suffered a respiratory arrest from which she could not be resuscitated.[13] An inquiry by the New York State Health Department and a New York grand jury indicated that the death was probably preventable, though no criminal indictments were returned.[12] A New York State ad hoc committee then made recommendations about intern and resident work hours and supervision,[14] which were in turn adopted by many states and certification agencies. Now, following the turn of a new century, internal medicine programs must meet similar standards for intern and resident work hours and supervision or risk losing accreditation. As a result, the experience of the typical intern or resident, while by no means enviable, will at least be more tolerable.

Isolation

ICUs have always been viewed as being a "special place" within the hospital[15] and are excellent examples of territories where stress during residency is rampant. Soon after the widespread use of ICUs in the United States began, in the 1960s, Koumans described them as communities set apart from the rest of the hospital community, with their own environments, personnel, protocols, and problems.[16] From the perspective of a house officer, this isolation is emphasized by the specialized equipment and ter-

minology used by intensivists, and even by specialized charting systems.

> *July, 1990s:* To prepare for my first day and night, in addition to my stethoscope, reflex hammer, ophthalmoscope, reference books, a brand new white coat, and a slew of pens, I packed my glasses and contact lens case, a comb, and a change of underwear. Sadly, the last two would go unused. At sign-in rounds, the post-call intern-junior pair from the previous group gave report on all the patients. The intern did most of the talking, giving a patient's name, his or her age and main medical problem, recent events in the hospital, and doings overnight: "Mr. C [patient's initial has been changed] is a 76-year-old man with COPD and a pneumonia who was intubated two days ago. Chest CT showed consolidation in his right middle and lower lobes. Last night, we weaned his vent to an FIO_2 of 0.4 with a pressure support of 15 and PEEP of 5." They seemed almost giddy from having completed their tour in the MICU, particularly the "intern" who, as of today, was now a JAR. I was his replacement.
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> Sign-in rounds took place in a windowless conference room adorned with pictures that had been ripped from a calendar and tacked up on a corkboard, last night's uneaten dinner sitting on a couple of trays in the corner, and a wall-to-wall blackboard. It was hard to concentrate on anything other than work in this spiritless room. On the blackboard was a huge chart with columns divided into teams of intern-junior pairs and rows detailing categories: number of patients [on the service], deaths, saves, ethical saves. It was the group's way of keeping score of their victories and defeats for the month. I later learned that "ethical saves" were, in fact, patients who died with dignity. In the team's mind, at least, these patients did not have their lives prolonged inappropriately with technologically advanced machinery when they had no chance of a meaningful recovery.

The sense of isolation and separation in this entry—from the rest of the hospital, from the outside world, and from the patients (who become entries on a blackboard chart)—is palpable.

In their article "Training Issues in the Intensive Care Unit," Stern and Jellinek[17] describe the isolation of the ICU as "an old whaling ship within the ocean of a large academic medical center" and describe residents rotating through the ICU "as if it were a distant and isolated voyage." This "heading off to sea" or, more appropriately, "heading off to battle" mentality contributes not only to the isolation, but also to the success of modern-day ICUs. Clearly, patients benefit from the "all for one" (the "one" being the patient) attitude of the ICU staff. The staff, however, suffers from slights to their self-esteem, health, and psychological well-being.

Insecurity

The feelings of insecurity and worthlessness are magnified in interns, who start their residencies realizing that they have very little practical knowledge about caring for patients. Interns who start their residencies in the ICU then must learn both the general aspects of caring for all medical patients and the technical aspects of caring for extremely sick, often moribund ICU patients.

> *July, 1990s:* Our first patient was an 85-year-old woman with a complicated pneumonia. I started to ask her how she was feeling before realizing she couldn't answer with the ventilator tube in her mouth. So much for all of the substantive patient interactions I had learned about in medical school. We examined the patients together, fighting the cardiac monitor leads and I.V. lines with our stethoscopes. I struggled to figure out how to read the pages of flow sheets documenting vital signs and ventilator settings while my junior resident wrote the progress note for the day and dictated the plan. Formulating a plan for the day would be my job by the end of the month. I would learn from his plans until then. He also showed me how to use the computer system and reviewed the plan with the patient's nurse. I felt utterly useless.
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> *July, 1980s:* I've never felt so incompetent as I felt today.

The insecurity emphasized in the above entries occurs on a number of levels: from a lack of correlation between what was taught in medical school and situations that transpire in the hospital, including difficulty in even taking a simple history and performing a physical examination; from feeling inadequately prepared to record basic medical information (vital signs); and from being unable to fulfill one's basic role on the medical team. This type of insecurity can be allayed only through experience, the one commodity an intern is guaranteed not to possess.

Care for the Terminally Ill

Many, if not most patients in an ICU at any given time have terminal diagnoses. Caring for dying patients is stressful not only to immediate family members and friends, but also to the attendant medical staff, who may become close to both terminal patients and their families at this important crossroad in the patient's life. In this setting, house officers are at particular risk for psychiatric

disorders, such as depression and anxiety, because of the stressful nature of their work and their novice status in identifying feelings engendered by patients.[18] A survey of house staff and faculty members of a department of medicine revealed that nearly 60% recognized that they dealt poorly or inadequately with terminally ill patients[19]; this behavior may compound other feelings of inadequacy. The emotional manifestations of these feelings may include insensitive language, gallows humor, depersonalization of patients by calling them names, and use of sarcastic comments about a patient's appearance or mental state.[17] In this way, residents try to distance themselves from the ills of young patients, who may remind the house officer of his or her own vulnerability, and older patients, who may be reminiscent of a parent. The belief is that emotional distance or coarseness renders better, dispassionate patient care. In reality, suppressing these emotions may have long-term deleterious effects on the physician's emotional well-being and subsequent patient interactions.

> *July, 1990s:* Rounds with the attending lasted three hours—all of the time spent standing. I had heard about some residents—both men and women—who wore support hose during the ICU rotation. Now I could see why. The attending took a few digressions to teach pulmonary mechanics and ventilator management strategies, as well as some clinical management points. Blackboards were located strategically at points around the ICU, to facilitate teaching. Some of his instruction I remembered from med school, but most was completely new. The junior and senior residents digressed a few times to crack jokes, to relieve the tension of discussing patient after patient, all of whom were incredibly ill. Another intern and I were far too terrified to do much more than smile uncomfortably. After hearing that a patient was on four antibiotics, one senior commented, "Well, I guess we have everything covered, except maybe maggots!" When the attending asked how a severely demented man with a widespread infection was doing, the junior caring for him quipped, "Much better, though I still wouldn't want him as my Quiz Bowl partner. . . ." Down deep, I think everybody was a little scared by such profound illness and built a wall of humor around themselves so they could continue to function as doctors.

> *September, 1980s:* Late at night when no one is around except the memories inscribed, we allow the stored up and unprocessed feelings to flood onto this paper. It is very helpful—but how sad it is that it is so rare that we share the feelings with ourselves and with each other. Hour after hour, the visceral sensations give us clues that something is wrong, or right, within us. But before I can process any of this experience, I must move on. And so it goes—until we sit with this book in front of us and finally process some of these visceral sensations.

Sleep Deprivation/Being On-Call

A recent 2-part article by Alexander and Bushell[20] discussed methods residents employ to deal with night call—those evening, night time, and early morning hours when an intern and resident work at the hospital along with night-staff nurses, their responsibilities being to admit new patients to the hospital and to cover their own and their colleagues' other patients. The authors listed 2 coping mechanisms: covering over (in which residents disconnect from their own feelings and patients' feelings by overfocusing on learning the mechanics of the medical technique or procedure) and overreflecting (in which residents overthink and overfocus on the difficulty of night call and of their patients' situations). Both themes recur throughout the MICU journal.

Being on-call, responsible for as many as 4 or 5 times as many patients as one cares for during daytime hours, can be extremely stressful to a resident and lead to maladaptive coping mechanisms. This, in turn, can result in an overwhelming need to be cared for when a resident is post-call, when the feelings of overwhelming fatigue and the sense that one's performance was suboptimal are added to these stresses.

What occurs during a typical call night that leads to such stress? A study published by the University of Minnesota followed 35 internal medicine house officers at 3 teaching hospitals for 5 call nights to quantify how their time was spent.[5] The authors found that procedures occupied less than 12% of working time during the night and that house officers spent less than 2.5 hours talking to or examining patients. In contrast, interns and residents spent more time documenting a new patient's history and physical examination than actually taking the history and performing the examination. One fascinating finding involved the mean time (7–11 minutes) before a house officer was interrupted (mostly by pages) while obtaining a new patient's history and performing a physical examination. The mean time before interruption of sleep was 40 to 86 minutes.

A large component of the stress of being on-call, then, may be attributed not only to the responsibility of caring for many patients and the feeling of a lack of supervision, but also to the lack of control of being able to complete a task without interruptions and lack of substantive patient interactions. Patient interactions are limited as a survival technique—to preserve the hour or two of sleep interns and residents may be able to take while on-call.[5]

July, 1990s: To some extent, I must have been in denial about the entire concept of being on-call and what that implied. . . . My junior resident and I were responsible for managing 17 extremely sick patients, to whom anything could happen in the next twelve hours. And my entire expertise now consisted of writing an order for potassium. All of a sudden, the MICU seemed huge. . . . Recognizing my inexperience, my junior resident sent me on errands while he stayed in the Unit to manage the patients. . . . The entire hospital seemed much bigger that night. I escorted a newly ventilated patient from the Emergency Room back up to the Unit and wondered what I would do if, God forbid, he coded in the elevator.

Things remained pretty quiet until later that night, when we were called into a patient's room when he started vomiting blood in large quantities—bright red, with some clots. His blood pressure was plummeting. . . . We gave him intravenous fluids, along with blood and fresh frozen plasma, and then had to give him pressors. We tried to reassure him that he would be okay, but he looked at us doubtfully. He was scared out of his mind, just a tad so more than I was. We called in the GI team, and at three in the morning they performed upper endoscopy. They found huge, swollen verices and were able to put clips on them to stem the flow. At least for the moment, his blood pressure stabilized.

A couple of hours later, in one of the happiest moments since my wedding day two months before, I saw the sunrise over the Charles River. As the others returned that morning around 6:45 a.m., my resident took a couple of washcloths and ran them under the "boiling water" faucet in the sink and handed one to me to put over my face, as barbers do before giving a customer a shave—my consolation for having gotten no sleep.

In a letter to the "Sounding Board" section of the *New England Journal of Medicine* following the Libby Zion case, Timothy McCall, M.D., enumerated the hours that a typical resident spends in the hospital.[21] He detailed a 100-hour work week, with sleep consuming 44 hours, transportation, 5 to 10 hours; getting ready for work, 5 hours; and 1 hour per morning allowed for shower, dressing, and breakfast. By his estimation, this left only 9 to 14 hours free per week.

He also discussed sleep deprivation, arguing that studies of residents have demonstrated cognitive impairment following a night on-call, which must result in impaired patient care, with possible tragic consequences. In addition to difficulty with decision making, sleep deprivation can lead to difficulty in thinking, inappropriate affect, irritability, depression, memory deficits, depersonalization, and ideas of reference.[21]

Long Work Weeks

Interns and residents work long hours for a variety of reasons. Patient care predominates, the rationale being that hospitalized patients are "safer" if a physician is in the hospital in the event of an emergency at all times. House staff also take call for educational reasons: more patient contact time may translate into more opportunities for learning. Moreover, there are economical motivators for house staff to take call. An article in the *Journal of the American Medical Association* calculated that it would cost the state of New York $358 million in 1990 dollars to hire an additional 5358 full-time equivalents to compensate for the house-staff hours lost in implementing the new regulatory rules for house-staff hours and supervision following the Libby Zion case.[22]

Most residency programs have made huge strides in limiting work weeks to 80 hours, guaranteeing 1 day off per week, and limiting the number of continuous working hours to 24. These standards should become ubiquitous as programs become compliant with the new guidelines released on June 13, 2002, by the Accreditation Council for Graduate Medical Education. It remains to be seen whether these interventions will result in lower rates of iatrogenesis and resident leaves of absence and better overall house-staff quality of life.

July, 1990s: [My junior resident] and I rounded on our patients again, just as we had done the previous morning, then again with the attending, then again when we were alone. It was beginning to feel like the movie *Groundhog Day*. Every day was exactly the same, except we became progressively more tired. At first we were both pretty energized from having seen our colleagues return to "save the day." After seeing about two patients, though, we were dragging! Attending rounds started, and he and I alternated falling asleep, having to be nudged by one of the other residents to answer the attending's questions. Everyone laughed at our helplessness! We were both deemed low scorers on the Glasgow coma scale. I have never felt the pain of such profound fatigue, which I could not yet relieve with sleep.

April, 1980s: Let me restate first things first. About internship: nothing in house-staff training compares with the intensity and impact of sudden terrific (as in Melville, terror-ific) awareness of the palpable absurdity in what we so often actually do as when it comes through the numbing film of months of chronic sleep deprivation. It seems in retrospect something like big strobe lights sud-

denly only feet away; enjoy. And nothing compares with the pain of pushing back sleep again and again. You may some day miss the former but never the latter.

August, 1990s: On the drive home I fell asleep at a stoplight. Twice. I opened the windows, blasted the stereo, and drank Diet Coke to make it the rest of the way. It was a sunny, beautiful day outside, but I could care less. After pulling down all the shades in the house, I collapsed in bed, still in my scrubs, and slept such a deep, impenetrable sleep. I had made it through my first two days as an intern, my first night on-call as an intern. I was a member of the initiated.

These entries are at first glance humorous, but actually highlight the absurdity and actual danger (physical and emotional, and for both the house officers themselves and for patients) of long hours spent in the hospital.

CONCLUSIONS

In reality, little has changed since Cassem's 1979 warning about internship.[7] Stressors continue to abound, and little relief is in sight. These stressors include isolation, insecurity, care for the terminally ill, sleep deprivation/on-call nights, and long work weeks—themes repeated over and over in the writings of the residents during a 20-year period. Over the years, scores of house staff have turned to the journal to read the musings of others and to scribe their own, to gain perspective, and to bond with others "in the same boat." It was often the sea of calm before returning to the storm of a night on-call.

Significantly more effort will be required on the part of physicians to provide humane and highly skilled care for patients. This, in turn, will require adequate and appropriate support for generations of house officers embarking on a medical career. By placing the struggles of medical house officers in the context of the rigors of a medical training program, recognizing the stresses of colleagues past who were placed in a similar environment, and highlighting the overarching issues that affect every intern and resident, trainees and their residency training programs can be prepared for the intensity of the ICU experience and for work in clinical practice settings that follow completion of residency training. Failure to pay attention to the hazards of medical training will leave physicians ill-prepared for the rigors of medical practice and for a satisfying home life that complements one's life as a physician.[23] A loss of compassion and the satisfaction associated with caring for the critically ill may result from unchecked stress during and after residency training. Efforts to monitor for and alleviate stressors (e.g., seminars in practice management, psychotherapy, and continuing education) are crucial for the health of our practitioners.

Paying attention to these stressors will make it less likely that one will become insensitive to the plight of others and more likely that the transition to clinical practice settings following training will be smoother. Such efforts will help retain the compassion typically associated with the early years of medical education.

Drug names: haloperidol (Haldol and others), meperidine (Demerol and others).

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